

[CLAIMS:

1. A method of imaging an imperforate substrate on a substantially uniform imaging surface of said substrate so as to provide said substrate with a print pattern, said print pattern comprising at least two superimposed layers of marking material and being defined by means of 1) said substrate having at least one of said at least two layers of marking material on first portions of said substrate and 2) said substrate being devoid of both of said at least two layers of marking material on other portions of said substrate, said at least two superimposed layers of marking material having at least one length of common boundary within said print pattern, said method including applying at least two initial, continuous, superimposed layers of said marking material onto a substantially imperforate base layer and removing portions of said initial, continuous, superimposed layers of said marking material from said base layer, while maintaining the imperforate nature of said base layer, by means of a force selectively applied to said marking material while said marking material is being supported by said base layer, and wherein said substrate has at least one substantially different material property to said base layer, and wherein at least one of said at least two layers of marking material is applied to said substrate with a surface thereof directly in contact with said imaging surface of said substrate.
2. A method as claimed in claim 1, wherein said at least two layers of marking material are transferred from said base layer to said substrate.
3. A method as claimed in claim 1, wherein said force is selectively applied to a surface of said marking material remote from said base layer.
4. A method as claimed in claim 1, wherein said marking material is transferred from said base layer to said imaging surface of said substrate such that said at least one of said at least two layers of marking material is directly in contact with said imaging surface of said substrate.

5. A method as claimed in claim 1, wherein said base layer is a decal carrier and said at least two initial superimposed layers of said marking material are applied to said decal carrier; parts of said at least two initial superimposed layers of marking material are removed from said decal carrier such that a decal is formed on said decal carrier by non-removed parts of said at least two initial superimposed layers of marking material; and said decal is transferred from said decal carrier to said substrate.
6. A method as claimed in claim 5, wherein said removed parts of said at least two initial superimposed layers of said marking material are removed from said decal carrier before said non-removed parts of said at least two layers of marking material are transferred to said substrate.
7. A method as claimed in claim 1, wherein said substrate is light permeable, and one layer of said at least two layers of marking material is of one colour and the other layer of said at least two layers of marking material is of another colour, and wherein said one layer of said one colour is visible from one side of said substrate and is not visible from the other side of said substrate.
8. A method as claimed in claim 1, wherein said base layer is transmuted into said substrate by application of energy.
9. A method as claimed in claim 8, wherein said energy is thermal energy.
10. A method as claimed in claim 1, wherein said force is a cutting force applied to said at least two initial superimposed layers of said marking material along said at least one length of common boundary of said print pattern.
11. A method as claimed in claim 1, wherein said force is a scraping force.
12. A method as claimed in claim 1, wherein said force is applied by a heated profiled roller, said heated profiled roller having recessed portions from an otherwise cylindrical surface.

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13. A method as claimed in claim 12, wherein said at least two initial superimposed layers of marking material are applied to a decal carrier , and said heated profiled roller is applied to a surface of said at least two initial superimposed layers of marking material remote from said decal carrier.
14. A method as claimed in claim 1, wherein said base layer has a primary surface to which said marking material is applied, and wherein said primary surface of said base layer comprises a substantially uniform material.
15. A method as claimed in claim 1, wherein said base layer has a primary surface to which said marking material is applied, and wherein said primary surface of said base layer comprises a plurality of materials.
16. A method as claimed in claim 1, wherein said base layer comprises a substantially different chemical composition than the chemical composition of said substrate.
17. A method as claimed in claim 5, wherein said non-removed parts of said at least two initial superimposed layers of said marking material are transferred by means of a selectively applied suction force.
18. A method as claimed in claim 17, wherein said selectively applied suction force is applied to a surface of said decal remote from said decal carrier.
19. A method as claimed in claim 17, wherein said selectively applied suction force is applied to a surface of said decal carrier remote from said decal.
20. A method as claimed in claim 1, wherein said substantially uniform imaging surface is plane.

21. A method as claimed in claim 1, wherein any cross-section through said substantially uniform imaging surface is of single curvature.
22. A method of imaging an imperforate substrate on a substantially uniform imaging surface of said substrate so as to provide said substrate with a print pattern, said print pattern comprising at least two superimposed layers of marking material and being defined by means of 1) said substrate having at least one of said at least two layers of marking material on first portions of said substrate and 2) said substrate being devoid of both of said at least two layers of marking material on other portions of said substrate, said at least two superimposed layers of marking material having at least one length of common boundary within said print pattern, said method including applying at least two initial, continuous, superimposed layers of said marking material onto a substantially imperforate base layer and removing portions of said initial, continuous, superimposed layers of said marking material from said base layer, while maintaining the imperforate nature of the base layer, by means of a force selectively applied to said marking material while said marking material is being supported by said base layer and wherein said substrate has at least one substantially different material property to said base layer, and transferring marking material remaining on said base layer to said first portions of said substrate, and wherein at least one of said at least two layers of marking material is applied to said substrate with a surface thereof directly in contact with said imaging surface of said substrate.
23. A method of imaging an imperforate substrate on a substantially uniform imaging surface of said substrate so as to provide said substrate with a print pattern, said print pattern comprising at least two superimposed layers of marking material and being defined by means of 1) said substrate having at least one of said at least two layers of marking material on first portions of said substrate and 2) said substrate being devoid of both of said at least two layers of marking material on other

portions of said substrate, and said at least two superimposed layers of marking material having at least one length of common boundary within said print pattern, said method including applying at least two initial, continuous, superimposed layers of said marking material onto a base layer, transferring said at least two initial, continuous, superimposed layers of said marking material to said substrate by means of a force selectively applied to said marking material while said marking material is being supported by said base layer, and wherein said substrate has at least one substantially different material property to said base layer, and removing portions of said initial, continuous, superimposed layers of said marking material from said substrate, and wherein at least one of said at least two layers of marking material is applied to said substrate with a surface thereof directly in contact with said imaging surface of said substrate.

24. A method of imaging an imperforate substrate on a substantially uniform imaging surface of said substrate so as to provide said substrate with a print pattern, said print pattern comprising at least two superimposed layers of marking material and being defined by means of 1) said substrate having at least one of said at least two layers of marking material on first portions of said substrate and 2) said substrate being devoid of both of said at least two layers of marking material on other portions of said substrate, and said at least two superimposed layers of marking material having at least one length of common boundary within said print pattern, said method including applying a base layer to said imaging surface of said substrate, applying at least two initial, continuous, superimposed layers of said marking material onto said base layer, and removing portions of said initial, continuous, superimposed layers of said marking material from said base layer by means of a force selectively applied to said marking material while said marking material is being supported by said base layer, and wherein said substrate has at least one substantially different material property to said base layer, and wherein said base layer is removed from said substrate, and at least one of said at least two layers of marking material is applied to said substrate with a

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surface thereof directly in contact with said imaging surface of said substrate.

25. A method of forming an imperforate transmuted substrate having a print pattern on a substantially uniform imaging surface of said transmuted substrate, said print pattern comprising at least two superimposed layers of marking material and being defined by said transmuted substrate 1) having at least one of said at least two layers of marking material on first portions of said transmuted substrate and 2) said transmuted substrate being devoid of both of said at least two layers of marking material on other portions of said transmuted substrate, and said at least two superimposed layers of marking material having at least one length of common boundary within said print pattern, said method including applying at least two initial, continuous, superimposed layers of said marking material onto a starting substrate and removing portions of said initial, continuous, superimposed layers of said marking material from said starting substrate by means of a force selectively applied to said marking material while said marking material is being supported by said starting substrate, and wherein said starting substrate is transmuted by means of energy applied to said starting substrate such that the transmuted substrate has at least one substantially different material property than said starting substrate, and wherein at least one of said at least two layers of marking material is applied to said starting substrate with a surface thereof directly in contact with a surface of the starting substrate that is transmuted into said imaging surface of said transmuted substrate.

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being supported by said substrate at the time of said removing, and
wherein said substrate is transmuted by means of energy applied to said
substrate such that the transmuted substrate has at least one substantially
different material property to said substrate, and wherein at least one
5 surface of said at least two layers of marking material is applied directly in
contact with said imaging surface of said transmuted substrate.